

### **REMARKS**

Claim 39 has been amended to recite a carbon-carbon double bond and a carbon-carbon triple bond. Support for this amendment can be found in the specification, for example, on p. 16, lines 12-19, where B and D are described as being of any length, and potentially including structures such as double bonds or triple bonds. Thus, no new matter has been added.

Claims 1-103 are pending for examination, with claims 8, 21-24, 27, 40, 42, and 51-102 being withdrawn from consideration.

### **Rejections under 35 U.S.C. §112, ¶2**

Claims 1-7, 9-20, 25, 26, 28-39, 41, 43-50, and 103 have been rejected under 35 U.S.C. §112, ¶2, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

The Patent Office asserts that the phrase “having electrical properties such that electronic interactions extend at least 2 monomer units from their source,” in the context of adjacent language in the claim, is indefinite because the metes and bounds are not readily ascertainable. Applicants respectfully disagree. The specification discusses electronic interactions within a polymer molecule, for example, on p. 5, lines 3-6 in reference to conjugated groups that extend between different monomer units of the polymer molecule. One of ordinary skill in the art, in examining a polymer molecule, would thus be able to determine whether such electronic interactions exist, for example, by determining the presence and location of conjugated groups within the polymer molecule.

The Patent Office has also rejected claim 39, stating that elements B and D contradict the structure presented in the claim. While Applicants do not understand the specific nature of the rejection given by the Patent Office, and respectfully request clarification, Applicants have amended claim 39 to clarify that B and D can each be a carbon-carbon double bond or a carbon-carbon triple bond that are structurally located between elements A and C of the polymer. It is believed that this amendment addresses the concerns of the Patent Office.

### Interpretation of Claims

In Paragraph 4 of the Office Action, the Patent Office indicates that spectral characteristics of the aggregate, as claimed, will be met by a prior art aggregate that is *substantially identical* to the instantly claimed aggregate (emphasis added). The Applicants disagree. Any prior art aggregate that differs from the instantly claimed aggregate may or may not meet the claimed spectral characteristics. The generality stated by the Patent Office can not be supported without evidence.

Applicants would also like to clarify that each claim of the instant application should be interpreted based upon its specific recitation (taking into account equivalents, where appropriate). In this specific instance, the statement of the Patent Office is incorrect in that claim 1 does *not* require each polymer molecule, prior to aggregation, to have a molecular weight of at least 7,000 g/mol.

### Rejections in view of Swager

Claims 1-7, 9-20, 25, 26, 28-39, 41, 43-50, and 103 have been rejected under 35 U.S.C. §102(e) as being anticipated, or as being obvious over, Swager, et al., U.S. Patent Application Publication No. 2003/0178607 ("Swager").

To begin, Applicants do not concede that Swager is properly prior art to the Applicant's claimed inventions. Applicants reserve the right to establish invention dates for the claimed inventions that are on or before the effective 35 U.S.C. §102(e) date of Swager relied on in the Office Action and/or to establish that the subject matter relied upon in the rejection is not that of "another" in connection with the rejected claims.

Applicant do not see where in Swager is there a disclosure or a suggestion of an aggregate of polymers. To the contrary, Swager does not disclose the use of aggregates, and in fact, teaches away from aggregates. For example, the abstract of Swager states that "these desirable properties can be provided through polymers having rigid groups designed to *prevent* polymer reorganization, *aggregation*, or  $\pi$ -stacking upon solidification." (Emphasis added.) Thus, Swager teaches away from the aggregate compositions of the instant invention.

The Patent Office also asserts that, because Swager teaches polymers which may be similar to the ones described in the instant specification, the properties thus claimed are inherently and necessarily present. Applicants respectfully disagree. Claim 1 recites an aggregate composition, not an individual polymer. The aggregation of the polymers within the aggregate structure recited in the claim is partially or wholly responsible for giving the aggregate composition certain novel properties, also as recited in the claim. It is believed that these novel aggregates are not taught or suggested in Swager. Accordingly, regardless of whether or not Swager teaches or suggests polymer molecules as recited in the instant claims (which it is not necessary for Applicants to discuss in detail here since the point is moot in view of the following) the Patent Office has provided no evidence that Swager necessarily inherently discloses the aggregate structure described in claim 1, as is required for such a rejection, and, as noted above, Applicants believe that Swager clearly does not inherently disclosure such aggregation and even teaches away from the same.

Thus, for at least these reasons, it is respectfully requested that the rejection of claim 1 be withdrawn. Claims 2-7, 9-20, 25, 26, 28-39, 41, 43-50, and 103 each depend, directly or indirectly, from independent claim 1, and are believed to be allowable for at least the above-mentioned reasons. Thus, withdrawal of the rejection of these claims is also respectfully requested.

### CONCLUSION

In view of the foregoing remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this response, that the application is not in condition for allowance, the Examiner is requested to call the undersigned at the telephone number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee

Serial No.: 10/621,041  
Conf. No.: 8897

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occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Respectfully submitted,

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Docket No.: M0925.70137US00  
Date: June 10, 2005  
x06/10/2005x